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CONTRIBUTIONS TO A KNOWLEDGE OF THE HYMENOPTERA OF BRAZIL,
NO. 3. SPHEGIDÆ (sens. lat.).

BY WILLIAM J. FOX.

This paper forms a continuation of the reports on the collections of Hymenoptera made by and belonging to Mr. Herbert H. Smith. At least one more paper will follow, on the Thynniidæ, which will also contain some additions to the earlier reports.

Ampulex trigonopsis Sm.

A single specimen from Chapada (October), I doubtfully refer to this species. It agrees with Smith's description, but there are two large teeth on each side of the projecting carina of the clypeus, of which Smith makes no mention.

Sceliphron (Trigonopsis) rufiventre Fabr.

Five specimens from Maruru (April) and Santarem.

Sceliphron (Podium) denticulatum Sm.

Chapada (December); Santarem. Two specimens.

Sceliphron (Podium) consanguineum Sm.

Two specimens from Chapada (March) and Rio de Janeiro (October) are doubtfully referred to this species.

Sceliphron (Podium) flavipenne Lep.

Two specimens, ♀. Rio de Janeiro (November) and Santarem.

Sceliphron (Podium) romandinum Sauss.

Two examples of this fine species. Santarem (September).

Sceliphron (Podium) haematogastrum Spin.

Fourteen ♀ and thirteen ♂ specimens. This species is quite distinct by red legs and abdomen. The latter, however, becomes quite dark in some specimens, and the petiole is sometimes black and varies a little in length; the point of reception of the recurrent veins by the second submarginal cell is not constant.

Three specimens differ by having the wings subhyaline, not yellow, and may prove distinct. Perhaps they represent Saussure's *Podium egregium*.

Sceliphron fistulare Dhlb.

Six specimens. Pedra Branca and Maruru (April); Chapada.

Sceliphron figulum Dhlb.

Two specimens. Corumbá and Uacarizal (February).

Ammophila opulenta Guér.

A large series of this species from various localities. It is distinguished by its large size and strong tubercle of mesopleura. The male has the clypeus prominently produced into a tooth, and together with the face, covered with golden pubescence. It is best distinguished by the strongly tuberculate mesopleuræ.

Ammophila miliaris Cam.

Twelve male specimens. Chapada (January to March); Santarem. Greatly resembles *opulenta*, but the mesopleuræ not tuberculate and clypeal prominence shorter.

Ammophila abbreviata Fabr.

A large series of both sexes.

Ammophila aureo-notata Cam.

One female and nine male specimens. Chapada (March, April); Corumbá and Pedra Branca (April); Santarem.

Ammophila moneta Sm.

Four female and five male specimens. Uacarizal (February); Pedra Branca and Chapada (April); Santarem.

A female and five males differ only in the sides of petiole and base of second segment diffused with reddish, and are no doubt *A. fragilis* Smith. *Moneta* and *fragilis* are evidently one species.

Ammophila asperata n. sp.

♀.—Head with strong scattered punctures; clypeus medially finely punctured, its fore margin broadly and squarely truncate in middle; fore ocellus separated from the posteriors by a distance equal to less than half that between the latter; space between hind ocelli equal to less than two-thirds of that between them and eyes; first joint of flagellum a little shorter than the two following united; pronotum slightly excised medially; dorsulum coarsely punctured, but still not unevenly, posteriorly with several coarse transversely sinuous striæ, and sulcate down middle for its entire length; scutellum longitudinally striate; postscutellum rugose; upper surface of middle segment sulcate, rugose medially, the rugæ running into fine even striæ laterally; side of thorax rugoso-punctate, the meso-

pleuræ not tuberculate, with an }-shaped furrow; petiole composed of two joints; wings subhyaline, apices broadly darker, second submarginal cell subtriangular, narrowed more than one-half above, the first recurrent vein received near the middle, the second near apex. Entire insect deep black, abdomen velvety; face and clypeus with sparse fuscous pile; spot on tubercles and large one at each side of apex of middle segment, bright silvery. Length 22 mm.

♂.—Face and clypeus densely golden; clypeus drawn out into a median prominence, which is short and obtuse, and before which the clypeus is visibly depressed; space between hind ocelli nearly equal to that between them and eyes; dorsulum with rather dense pale pile, and, in addition, with a short, erect, pale fuscous pubescence; thorax sculptured as in the ♀; tegulæ silvery anteriorly. Length 22 mm.

Chapada (March). Three specimens. Has the general appearance of *abbreviata*.

Sphex (*Chlorion*) *hemiprasinus* Sichel.

Chapada (October). Three specimens.

Sphex (*Chlorion*) *cyaniventris* Guér.

One specimen; same locality and date as the preceding.

Sphex (*Isodontia*) *nigrocaeruleus* Tasch.

Nine ♀, three ♂ specimens. Chapada (March, April).

Sphex (*Isodontia*) *costipennis* Spin.

Five ♀, nine ♂ specimens; Chapada (February, March); Maruru and Pedra Branca (April); Santarem.

Sphex (*Isodontia*) *laevipes* n. sp.

♀.—Black, with grayish pubescence; face, clypeus, thorax beneath, hind coxæ, an oblique line on sides of middle segment (sometimes absent) extending to insertion of petiole, silvery; tegulæ, legs entirely or in part, petiole (the latter sometimes black) wine colored; wings fusco-hyaline, costal half much darker; clypeus bidentate, with long, sparse, pale hairs; eyes converging toward mandibles, the latter bidentate; space between hind ocelli nearly equalling that between them and eyes; first joint of flagellum not quite as long as the two following united; dorsulum and scutellum with distinct, separated punctures; middle segment rather coarsely granulated; the mesopleuræ with coarse punctures; legs comparatively scarcely spinose, spines of fore tarsi short; petiole about as

long as the first three hind tarsal joints; last ventral segment convex. Length 17–18 mm.

♂.—Colored like the ♀; but in one example the thorax except dorsulum, is more or less wine colored; clypeus more convex, its apex broadly incurved, silvery pubescence denser; first joint of flagellum nearly as long as two following united; scutellum impressed medially. Length 18 mm.

Uacarizal (February); Chapada (March). Three ♀, one ♂ specimens. *S. laevipes* is probably the form mentioned by Kohl as a dark variety of *S. costipennis*, his specimen, a ♂, having come from Rio Grande do Sul. It differs from *costipennis* not only in color, but by the smoother legs, longer petiole of ♀, etc.

Sphex (*Isodontia*) **azteca** Sauss.

One specimen, a ♂. Chapada (March).

Sphex caliginosus Er.

Fifteen ♀, 22 ♂ specimens. Chapada (March, April); Santarem.

Sphex fuliginosus Klug (= *congener* Kohl).

A large series of females. Chapada (March, April).

Sphex Servillei Lep. (= *latior* Er. = *roratus* Kohl).

I have no doubt that *latior* is identical with *Servillei*. The large series present, indicates a common occurrence. Chapada (January, March, April); Santarem. Ninety-one specimens, of which only five are females.

Sphex funestus Kohl.

Chapada (March, April); Corumbá (May); Santarem. Four specimens.

Sphex neotropicus Kohl.

Chapada (March, April); Santarem. Three female, two male specimens, one of the latter with reddish fore legs.

Sphex ingens Sm.

A single male of this huge species, without particular locality or date of capture.

Sphex melanopus Dhlb. (= *ruficauda* Tasch.).

Three specimens. Uacarizal (February); Corumbá (May).

Sphex brasiliensis Sauss.

A single specimen of the var. *tinctipennis* Cam. Chapada (April).

Sphex flavipes Sm.

One ♀, six male specimens of the var. *Iheringii* Kohl. Chapada (February, March).

Sphex ichneumoneus Linné.

Four specimens of the typical form from Santarem (February) and Maruru (April). Three of the var. *dorsalis* from same localities. Over thirty of the var. *sumptuosus* collected from February to April.

Sphex dubitatus Cress.

The geographical distribution of this species is extended considerably by three specimens in the present collection, collected at Chapada (February, March) and Corumbá (April). There is also a specimen in the collection of the American Entomological Society marked Mexico.

Four specimens, which may be the ♂ of this species, have the pubescence denser and more golden, particularly on head in front; antennæ rather long and slender, first joint of flagellum about as long as second and three fourths of third joint united; face much narrower than in *ichneumoneus*; petiole about as long as second and third hind tarsal joints united; legs more or less black; abdomen with more or less black blotches above; last ventral plate tridentate apically, the central tooth prolonged, with a carina which runs almost to base of segment, laterally the segment bears a bunch of long yellowish hairs, somewhat concealing the lateral teeth. Length 17-18 mm.

Corumbá and Pedra Branca (April).

Sphex ferrugineipes n. sp.

♀.—Head and thorax black, with pale, not dense pubescence; face, clypeus at sides, line on pronotum, sides of dorsulum and spots on sides of thorax and at apex of middle segment with silvery pile; mandibles, except apex, tegulæ, legs, except coxæ, and base of trochanters, and abdomen, except petiole, entirely, or in part, bright red; eyes but slightly converging beneath; face somewhat narrower than in *ichneumoneus*; clypeus convex, emarginate medially, having the appearance of being bidentate, or entire, front distinctly punctured; space between hind ocelli about equal to that between them and eyes; dorsulum with rather strong separated punctures, those of mesopleuræ finer and even; middle segment above with a transverse, indistinct striation; tarsal comb well developed, the

first fore tarsal joint with six to seven spines; petiole black, shorter than combined length of second and third hind tarsal joints; abdomen above and beneath with a distinct, sparse punctuation; wings subhyaline, not yellowish, apical margins broadly darker. Length 20–22 mm.

♂.—Colored and clothed like the ♀, the fore margin of the clypeus in addition being sometimes reddish; space between hind ocelli a little greater than that between them and eyes; first joint of flagellum shorter than the second and third united, the second a little shorter than the third; last ventral plate indistinctly carinated down middle, its apex prolonged triangularly in the middle. Length 19–21 mm.

Chapada (March, April, October); Corumbá (April). Three ♀, 10 ♂ specimens. Distinguished from *ichneumoneus*, *dubitus*, etc., by sparser pubescence, bright red of abdomen, strongly punctured dorsulum (and clypeus in ♀), shape of last ventral plate in ♂, etc.

Spheg (*Priononyx*) **Thomæ** Fabr.

Quite a large series of both sexes from various localities, collected in the months of February, March, April, June, September.

Spheg (*Priononyx*) **bifoveolatus** Tasch.

Twenty-seven ♀, 13 ♂ specimens. Chapada (March, April, November); Corumbá (April).

Psen aurifrons Tasch.

Chapada (October, November). Two specimens.

Psen Smithii n. sp.

♂.—Black; antennæ basally and beneath, mandibles medially, tegulæ, tubercles, fulvous; tips of femora, four anterior tibiæ, base of hind pair, and tarsi, yellowish; second abdominal segment at base more or less reddish; abdomen with a bluish metallic cast; head below antennæ with dense silvery or pale golden pubescence; vertex rather finely punctured; ocelli in a triangle, the space between hind pair about equal to that between them and eyes, the latter converging beneath; clypeus subtruncate or subemarginate medially; antennæ rather stout, perhaps a little shorter than head and thorax; dorsulum shining, sparsely punctured; scutellum impressed down middle; mesopleuræ punctured similarly to dorsulum; middle segment covered with coarse reticulations, the basal enclosure small, with oblique rugæ on each side of a smooth, triangular, cen-

tral area; petiole of abdomen about as long as hind femur, flat above, not sulcate; apical margins of segments testaceous; wings dark subhyaline, iridescent; stigma testaceous, nervures darker; second and third submarginal cells each receiving a recurrent nervure, second submarginal cell narrowed about one-third above; basal vein and cubital of hind wing interstitial. Length 10 mm.

Chapada (April). One specimen. Allied to the North American *P. fuscipes*.

Stigmus neotropicus Kohl.

One specimen. Corumbá (May).

Stigmus hexagonalis n. sp.

♀.—Black; mandibles, except apex, yellowish; tegulæ, tubercles, antennæ and legs, including coxæ, reddish-brown; cheeks angularly produced beneath; head shining, not striated; ocelli forming a low triangle, placed in pits; the space between hind pair much less than that between them and eyes; clypeus acutely bidentate medially; prothorax above marked by a transverse series of strong foveæ, the antero-lateral angles of pronotum acutely produced, as are also the sides of prothorax; dorsulum punctured, with three deep parallel furrows, the middle one of which runs to apex, the others hardly half as long; suture between dorsulum and scutellum foveolate; middle segment coarsely reticulate, at base above with a hexagonal enclosure, which bears a longitudinal medial fold; petiole robust, shorter than hind tibiæ, with two deep sulci above, between which runs a rather sharp ridge. Length 5 mm.

Chapada (December, January); Corumbá (May). Three specimens. Seems to be allied to *S. temporalis* Kohl, from Guatemala, of which only the ♂ is known.

Trachypus Romandii Sauss.

Two specimens. Chapada (November, December).

Nysson tomentosus Hdl.

Chapada (December). One specimen.

Nysson pilosus Sm.

Uacarizal (February). One specimen.

Bothynostethus sp.

A ♂ specimen from Santarem I am unable to refer to any of the three described species of *Bothynostethus*. It agrees with *Saussurei* in the color of wings, but the mandibles are deeply excised and the

second discoidal cell is much higher than broad. In the two latter characteristics it approaches the Mexican *B. nitens*, but differs in color of wings and larger size (10 mm.). The clypeus is dentate laterally as in *Saussurei*, of which it is, perhaps, the ♂.

Scapheutes brasilianus Hdl.

One specimen. Chapada (March).

Gorytes specialis Sm.

Four specimens that agree fairly with the description of *specialis*. It is evidently close to *G. polybia* Hdl., but the suture between dorsulum and scutellum is not foveolate. Chapada (January); Marurú; Santarem.

Gorytes facilis Sm.

Four specimens. Corumbá (January, April); Santarem. This species belongs, apparently, to the group of *G. simillimus* as defined by Handlirsch in his monograph.

Gorytes scutellaris Spin.

Marurú (April); Chapada (April, November); Santarem. Nine examples.

Gorytes seminiger Dhlb.

One specimen. Rio de Janeiro (November).

Gorytes cayennensis Spin.

Six specimens. Marurú (April); Rio de Janeiro (November); Santarem.

Gorytes fuscus Tasch.

Santarem. One specimen.

Gorytes valens n. sp.

♀.—Black; labrum, clypeus, face below antennæ, scape beneath, fore femora and tibiæ beneath, and apical margin of abdominal segments 2–5, bright yellow; anterior tarsi, except the first joint internally, and a spot on apical joint, and a ring at base of joints 2, 3 and 5 of the remaining tarsi, pale yellow; head and thorax with long, grayish hairs, unusually hirsute for *Gorytes*; eyes strongly converging beneath; ocelli in a low triangle, situated in depressions or pits: space between hind pair greater than that between them and eyes; clypeus large, convex, somewhat triangular, its fore margin broadly truncate; flagellum rather strongly clavate, the first joint at least twice as long as second; dorsulum with a distinct,

rather strong, even punctuation, and anteriorly in the middle with two, closely parallel, impressed lines; the remainder of thorax punctured, but less closely than dorsulum, the apex of the large basal area of middle segment being almost smooth; the middle segment is short and rounded; mesosternum not at all carinated; the episternum and epimerum distinctly separated; wings subhyaline, yellowish along costa, darker in marginal cell; submedian cell of hind wings terminating beyond the origin of the cubital vein; legs stout, the tibiæ serrato-spinose, the spines pale; abdomen robust, more granulate than punctate, on the first segment, however, and ventrally punctured; held in certain lights the abdomen is covered with golden pile, the apical segments with long, yellowish hairs; first segment meeting the second broadly, the latter depressed at base above, ventrally truncated at base, and with a tubercle, so that when viewed from the side it is angularly produced; pygidium large, well developed, aciculate, covered with golden pubescence. Length 14–26 mm.

Chapada (December). Three specimens. Seems to be very distinct from any *Gorytes* heretofore described. It seems intermediate of the groups *mystaceus*, *nigrifrons*, etc., and *fuscus*, *robustus*. It agrees with the former in shape of second ventral segment, but the recurrent veins are both received by the second submarginal cell. From the *fuscus* group the former of these two characteristics will separate it. Then again in the eyes, strongly converging toward clypeus, it also differs. Except for the second ventral segment it is not unlike *G. moneduloides*, but it is a much more robust insect.

Gorytes partitus n. sp.

♀.—Head and abdomen, except first segment, black; thorax, first abdominal segment and legs reddish-brown; clypeus, except medially, labrum, base of mandibles, spot at base of antennæ, scape beneath narrow line on pronotum, dorsulum at sides, tegulæ, spot beneath them, scutellum, postscutellum, large spot at each side of middle segment, base of first abdominal segment, and four anterior tibiæ and tarsi in part, yellow; eyes distinctly converging beneath clypeus transverse, punctured, broadly truncate; antennæ but little thickened apically, the first joint of flagellum about one-third longer than second; thorax practically impunctured; suture between dorsulum and scutellum foveolate; mesosternum carinated, the epimerum and episternum separated; middle segment convex, divided by a furrow its entire length, the basal area large; tibiæ and tarsi

distinctly spinose, pulvilli large, fore tarsi distinctly ciliated; abdomen subpetiolate, the first segment scarcely coarctate at apex; second dorsal segment depressed at base, second ventral convex; pygidium distinct, longitudinally rugose; wings subhyaline, fuscous along costa and in marginal cell, nervures dark, stigma brown, submedian cell of hind wings terminating distinctly beyond origin of cubital vein: head and thorax with silvery pile, that on the dorsum brownish. Length 14 mm.

Chapada (December). One specimen. Seems to be related to *notabilis* Hdl., and *fumipennis* Sm.

Gorytes coloratus n. sp.

♀.—Head and thorax black, abdomen, and legs in part, reddish-brown; scape, clypeus sometimes, mandibles basally, pronotum, scutellum anteriorly, postscutellum, spot beneath tegulæ, and on each side of segments 2 and 3, or 2-4, anterior tibiæ and tarsi entirely, medial tibiæ, medial tibiæ within, and medial, and hind tarsi more or less, yellowish; flagellum beneath at base, tegulæ, tubercles, reddish-testaceous; dorsulum somewhat iridescent; head broader than long; frontal impression deep; eyes large, strongly flattened anteriorly, strongly converging toward clypeus; ocelli forming a low triangle, placed in depressions; clypeus distinctly punctured, strongly depressed transversely before the anterior margin; scape longer than the two following joints united, first joint of flagellum nearly as long as joints 2 and 3 united; the pronotum appears as a thick, transverse fold; dorsulum shining, with distinct separated punctures; mesosternum not carinated, epimerum and episternum separated, but not very distinctly; punctuation of mesopleuræ stronger than that of the dorsulum; suture between dorsulum and scutellum not foveolate; scutellum strongly convex; middle segment with basal enclosure smooth and polished, the posterior face punctured and divided by a deep furrow which begins at the apex of the enclosure; legs stout, hind tibiæ thickened within at apex; first joint of medial tarsi somewhat curved; tibiæ and tarsi spinose; pulvilli distinct; abdomen distinctly punctured most strongly on apical segments, first segment slender on basal half, then broadened to the apex, where it is convex, but not coarctate; pygidium rather large, obtuse at apex, deeply punctured; ventral segments 3-5 punctured along apical margin only; wings strongly iridescent, clear, the first and second recurrent nervures interstitial with the first and second transverso-

cubital veins respectively; cubital cell of hind wings terminating much before origin of cubital vein. Length 9 mm.

Marurú (April); Santarem. Two specimens.

This species belongs, no doubt, close to *G. violaceus* Hdl., described from a single defective specimen from Brazil, which, with other parts, lacked the abdomen. The present species is clearly more allied to the *bipunctatus* group than to *chilensis*, and it is probable that it and *violaceus* form a group. In coloration this new species seems quite distinct from its allies; it would be interesting to know whether the abdomen of *violaceus* is similarly colored.

Bembidula discisa Tasch.

Chapada (January, February, March, September, October). Twenty-three specimens.

Bembidula variegata Oliv.

Chapada (January, March, September, October, December). Fifteen ♀, five ♂ specimens.

Monedula signata Linné.

Chapada (March). Three females.

Monedula punctata Fabr.

Eleven ♀ specimens. Chapada (March).

Monedula surinamensis DeG.

Twenty specimens, representing both sexes, collected in January, April, September to December, chiefly at Chapada.

Monedula magnifica Perty.

Chapada (March, April). Sixteen specimens, all females, of this handsome species.

Stizus Bolivarii Hdl.

Chapada (January, December); Corumbá (February, April); Santarem. Ten specimens, which are probably this species. They have all the abdominal segments fasciate.

Trypoxylon pallitarse Sauss.

Five specimens. Santarem (February).

Trypoxylon niveitarse Sauss.

Ten specimens. Chapada (January, October, December); Santarem.

Trypoxylon rufosignatum Tasch.

Chapada (April). Three specimens.

Trypoxylon fabricator Sm.

Chapada (October). Three specimens. This species is probably identical with *T. gracile* Tasch.

Trypoxylon superbum Sm.

Chapada (April). One specimen.

Trypoxylon lævifrons Sm.

One specimen. Chapada (October).

Trypoxylon læve n. sp.

♀.—Deep black, shining; pubescence pale; hind tarsi except base and apex, dirty white; front with distinct, shallow punctures, furrowed from before anterior ocellus to a slight prominence just behind antennæ; first joint of flagellum about as long as the two following united; space between eyes above about equal to length of first joint of flagellum, beneath at clypeus it is somewhat less; clypeus carinated down middle, somewhat depressed laterally, its fore margin in the middle subtruncate; face and clypeus with silvery pubescence; thorax is distinctly punctured; middle segment with the posterior surface transversely striated, carinated laterally, parted by a deep furrow, the upper surface slightly depressed apically, sides apparently smooth; abdomen rather slender, much more elongate than in allied species, first segment slender, somewhat nodose at apex, fully one-third longer than second segment; the abdomen widens gradually from apex of first segment; wings fuscous, with blue reflection, pale at base and apex. Length 17 mm.

♂.—Colored like ♀, the wings considerably darker; clypeus squarely produced, sub-tridentate; antennæ short, clavate, first joint of flagellum curved, apical joint about as long as the three preceding ones united, these latter broader than long; thorax finely punctured; middle segment except sides entirely transversely striate, but finely so above at base, where it is also punctured; hind femora sublaminated beneath toward apex; abdomen stouter, and probably shorter than in ♀ (segments three *et seq.* missing), the first segment not spinose beneath. Length about 16 mm.

Marurú (April); Santarem. Three ♀, one ♂, specimens.

Trypoxylon insolitum n. sp.

♀.—Black; sides of the first segment and second and third more or less, pale reddish, or testaceous: pubescence of thorax pale, and rather dense; face and clypeus densely silvery, including the emargination of eyes; front with unusually coarse transverse rugæ

or folds, deeply impressed down middle; the anterior ocellus is placed in this furrow, which becomes shallower below and terminates in a flat projection over the bases of antennæ; first joint of flagellum a little shorter than the two following united; clypeus not carinated, prominent and rounded at apex; thorax finely punctured, nearly smooth; tegulæ testaceous; middle segment above parted by a deep furrow, which is transversely striated, and on each side of which another less distinct, curved furrow is present, posterior surface also parted by a furrow, finely and transversely striated; abdomen elongate, slender, the first segment almost linear on basal two-thirds, slightly nodose, its length equal to the following segments united; wings subhyaline, iridescent, nervures dark. Length 11 mm.

♂.—Clypeus shorter, subtruncate; first joint of flagellum slightly longer than two following united, apical joint small, not much longer than the preceding one; middle segment with the furrow deeper than in ♀, and the upper and posterior surfaces coarsely and transversely striated; space between eyes at top greater than length of first joint of flagellum, beneath at clypeus it is slightly less. Length 12 mm.

Rio de Janeiro (November); Santarem. One of each sex. Related to *fabricator* Sm. and *gracile* Tasch. The space between eyes at top and at clypeus is less in the ♀, than in the ♂, an unusual circumstance.

Trypoxylon medianum n. sp.

♂.—Black; sides of first and second segments, and the latter at base, reddish; clothed with pale pubescence, that on face, clypeus, tubercles, and postero-lateral angles of middle segment, pale golden; a silvery stripe runs below from tegulæ; clypeus tridentate at apex, the median tooth acute and longest; front apparently granulated, feebly impressed; a longitudinal raised line behind base of antennæ; space between eyes at top but slightly greater than that between them at the clypeus, somewhat greater than the length of first joint of flagellum; the latter subclavate, first joint about as long as two following united, the ultimate joint small, not much longer than the preceding one; dorsulum and scutellum with distinct, separated punctures, those of mesopleuræ finest; middle segment above finely punctato-striate, the posterior surface with distinct transverse striæ deeply furrowed down middle, sides punctured; hind trochanters not dentate; abdomen clavate, rather stout, first segment a little

nodose, as long as the two following united; wings subhyaline, apical margins fuscous, nervures dark. Length 13 mm.

Corumbá (April); Santarem. Two specimens.

Trypoxylon fallax n. sp.

♀.—Black; sides of the first and second segments and base of the latter reddish; face, clypeus and suture below tegulæ with silvery pubescence, that on pronotum pale golden; other pubescence pale; front coarsely granulated, with a prominence or tubercle behind antennæ, and above it a V-shaped depression; ocelli situated in depressions; space between eyes at top about equal to length of first joint of flagellum, beneath at clypeus somewhat less; clypeus flat, somewhat roundly produced, emarginate in middle of fore margin; thorax with distinct separated punctures; above the middle segment is finely punctato-striate, depressed slightly at apex, the posterior surface more distinctly striated and sulcate down the middle; first abdominal segment slightly nodose at apex, about one-quarter longer than the second; wings subhyaline, nervures dark testaceous. Length 13 mm.

Var. (?). More subtilely punctured; clypeus entire.

♂.—Similar to ♀, with the reddish color on abdomen more extended, the base of segments, 2–3 being of that color, and first joint of tarsi pale at base; clypeus roundly emarginate; first joint of flagellum slightly curved, the last joint but little longer than the penultimate; hind trochanters not dentate. Length 12 mm.

Chapada (March); Marurú; Santarem. Three ♀, one ♂, specimens. Closely resembles *medianum*, but the clypeus is emarginate, not dentate, front more coarsely granulated and with a V-shaped depression, etc.

In addition to the foregoing species of *Trypoxylon* the collection contains eight other species, apparently new, represented by single specimens, which, for that reason and to the inadequate descriptions of many neotropical species, I have refrained from describing at the present time.

Oxybelus marginatus Sm.

A single specimen from Santarem.

Oxybelus americanus Spin.

Five specimens. Chapada (May, December); Marurú (April); Santarem.

Crabro pugnans Sm.

Chapada (April). One specimen. *Pugnans* belongs to the group *Crossocerus*.

Crabro carinatus Sm.

Two specimens. Pedra Branca (April); Rio de Janeiro (November). Seems to belong to *Solenius* group, as characterized in Kohl's table.

Crabro verticalis Sm.

Fourteen specimens, all females. Chapada (January, March, May, December). This species apparently belongs to *Crossocerus* group.

Crabro atitlanæ Cam.

Two specimens from Rio de Janeiro (November) and Benivides (July) I refer with some doubt to *atitlanæ*. If not identical they are closely allied.

Crabro productus n. sp.

♀.—Head large, closely punctured; ocelli in a curved line, space between hind pair slightly, if anything, less than that between them and eyes; clypeus sharply carinated, its fore margin rounded medially; first joint of flagellum about one-third longer than second; pronotum bordered anteriorly by a sharp carina, terminating in a small tooth laterally; dorsulum rugoso-punctate, more sparsely posteriorly, depressed down middle and bicarinate; scutellum with large, separated punctures; mesopleuræ longitudinally rugose, the mesosternum shining, with distant punctures; middle segment divided by a longitudinal furrow, which is deepest within the basal enclosure, which is large and rather finely rugose; posterior face with transverse folds on rugæ, not margined laterally, the sides microscopically striated; tibiæ distinctly spinose; first dorsal abdominal segment with coarse, separated punctures, with a margin of fine ones at apex; the second segment less strongly punctured; the remaining dorsals finely punctured; ventrals shining, the second with large, sparse punctures, the third, fourth and fifth with a transverse series of punctures before apex; pygidium narrow, rounded at apex, depressed, with large punctures. Black; cheeks and sides of thorax with silvery pubescence, that on face and clypeus golden, silvery in part in certain lights; scape, line on mandibles, pronotum, tubercles, line on metanotum, spot at apex of four anterior femora beneath, a line on all the tibiæ externally, the hind pair almost entirely, base of hind tarsi, large spot on each side of first

two dorsal segments connected by a narrow line, a medially narrowed fascia on dorsals 3-5, sixth almost entirely and a short line at each side of ventrals 2, 3, or 2-4, at apex, yellow; wings subhyaline, nervures testaceous. Length about 9 mm.

♂.—Similar to ♀; space between hind ocelli distinctly less than that between them and eyes; third and fourth joints of flagellum uniting in such a way as to form an emargination beneath, the fourth joint rather prominent at apex; furrowing forming the enclosure of middle segment foveolate; punctuation of mesosternum and second ventral segment finer and closer than in the ♀, but that of the abdomen dorsally is coarser; four anterior femora yellow at apex, a spot at apex of hind pair beneath; joints 1-3 of medial tarsi produced at apex on inner side. Length 8 mm.

Chapada (March, April, November, December). One ♂ example is very small, 5 mm. According to Kohl's table, belongs in the *Solenius* group.

The collection also contains several additional species of *Crabro*, probably new to science, but represented by single specimens.